Detailed System Design

Renewals – V 2.0

Document Review and Change Summary	
Version/ Review Date	**Brief Summary of Changes From Prior Version**
Version 1.0 10/14/03	Original
Version 1.1 12/18/03	Added instructions about First Name and Last Name and what to do if Renewal is for an organization v. an individual.
Version 2.0 04/26/04	Page 5: Expanded Last Name field size (**EXT_CUST_LAST_NM**) to 60 characters. Updated the Description (**ECRT_ CODE**). **EXT_CUST_FRST_NM** was a conditional field. Now it is optional. Page 6: The size of the field (**RNEW_NO**) is changed from 30 characters to 12 characters. Removed **RNEW_LAT_DT**. **TEXT** was an optional field. Now it is required.
Version 2.1 09/07/2004	Added new field, Ext_Cust_Div to LRDS table

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1. Overview

1.1. Document Definitions and Naming Conventions

This section describes/defines the DSD naming conventions applied in this document.

Transaction Layout Definitions

- Attribute – The name of the data element in the database.

- Description – A textual description of the data element.

- R/C – Required/Conditional. Required specifies that the data element is required by the interface for the transaction to successful submit. Conditional means that specified conditions must be adhered to by the interface for the transaction to successful submit. No Value or a Blank value means that the data element is not required.

- Type – The data type of the data element.

  - VarChar – Variable Character text. Alphanumeric data.

  - Byte – Unsigned character.

  - Char – Character. Fixed length alphanumeric text, required to meet the exact specified size.

  - Date – Date Format YYYY-MM-DD

  - Decimal – Numeric value with a specified decimal position (9,3) = 999999999.999

  - Boolean –True/False. True conditions = "true", False conditions = "false".

  - Memo – Alphanumeric Text with a maximum of 1500 characters.

  - Currency – Numeric, with two decimal positions. Format 9999.99.

  - Integer – Numeric value, a whole number.

  - Long – Numeric Value, a long whole number.

- Size – The (numeric) size of the data element

- NewMMARS Notes – Notes specific to the NewMMARS data element.

  - CVL – Coded Value List, the value of the data element must come from the CVL table specified in the NewMMARS Notes.

- MMARS Derivation Notes – Notes specific to translating MMARS document layout data to NewMMARS.

- o **H.**TEXT – Data element from the header or document section of the MMARS document layout.
- o **L.**TEXT – Data element from the line or detail section of the MMARS document layout.

XML Definitions and Conventions

- Attributes - Attributes are name-value pairs that occur inside start-tags after the element name.

- Elements - Elements are the most common form of markup. Delimited by angle brackets, most elements identify the nature of the content they surround. Elements normally begin with a start-tag, <element>, and end with an end-tag, </element>.

- CDATA Tags - In a document, CDATA instructs the parser to ignore (most) markup characters. Between the start of the section, <![CDATA[and the end of the section,]]>, all character data is passed directly to the application, without interpretation. Elements, entity references, comments, and processing instructions are all unrecognized and the characters that comprise them are passed "literally" to the application.

1.2. Usage

Departments have historically maintained Renewal information in their own Department systems, but have used the MMARS Renewal process to generate their renewal notices. This meant that renewal information, particularly customer codes, had to be re-entered in both the Department system and MMARS which required the Departments to maintain Renewal information in two places, locally and in MMARS. With the implementation of NewMMARS, the Departments have requested that the Department be responsible for their customer base and renewal scheduling, but use NewMMARS as a means to print Renewals notices. By allowing NewMMARS to print their notices, departments will be able to maintain NewMMARS scan line and lockbox services functionality.

Commonwealth Departments will provide the ability to electronically interface Renewal records from their local Departmental systems to the NewMMARS application. Renewal records will be submitted via CommBridge. To support the Renewal interface, NewMMARS will have an External Cash Receipt Table (ECRT) Code that will allow Comptroller's Office to manually establish and define accounting templates for Department's Renewal types applicable to their operations. ECRT Codes will be entered online in NewMMARS.

NewMMARS will store Renewal data submitted by the Departments on the License Renewal Data Storage Table. The License Renewal Data Storage Table will be updated by an interface file, which is submitted via a standard Renewal XML transaction format and will not be accessible by departments in NewMMARS online. The table will be used to store the data until a separate NewMMARS process prints the Renewals. A business validation process will enforce certain defined business rules, checking that all required data elements are provided in the interface file.

2.Publishable Specifications

2.1. LIC_RNEW_DT_STRG Transaction XML Layout

2.1.1   LIC_RNEW_DT_STRG Attributes

Attribute	Description	R/C	Type	Size	NewMMARS Notes	MMARS Derivation Notes
DEPT_CD	Department Code	R	VarChar	4	The Department Code must exist in the DEPT table.	DEPARTMENT
UNIT_CD	Unit Code	R	VarChar	4	The Unit Code must exist in the UNIT table.	
ECRT_CD	ECRT Code	R	VarChar	4	The **ECRT Code** must exist in the **ECRT** Type table.	RENEWAL-TYPE ECRT Code will replace RENEWAL-TYPE in NewMMARS
EXT_CUST_CD	External Customer Code	R	VarChar	20	This is the Department Customer Code. Departments are not required to submit VCUST Codes.	CUSTOMER-CODE + CUSTOMER-LOCATION * Note us the Department Customer Code
EXT_CUST_FRST_NM	External Customer First Name		VarChar	30		
EXT_CUST_LAST_NM	External Customer Last Name	R	VarChar	60	The Department is required to send the External's Customer's Last Name if the Licensee is an individual. The Department is required to send the Organization Name in the External Customer's Last Name data element if the Licensee is an organization.	
EXT_CUST_DIV	External Customer Division		VarChar	60	An additional address line to define Division etc.	
EXT_CUST_AD_1	External Customer Address 1	R	VarChar	75	The Department is required to send the Customer's Address.	
EXT_CUST_AD_2	External Customer Address 2		VarChar	75		
EXT_CUST_CITY	External Customer City	R	VarChar	60	The Department is required to send the Customer's City.	
EXT_CUST_ST	External Customer State	R	VarChar	2	The Department is required to send the Customer's State.	
EXT_CUST_ZIP_CD	External Customer Zip Code	R	VarChar	10	The Department is required to send the Customer's Zip Code.	

Attribute	Description	R/C	Type	Size	NewMMARS Notes	MMARS Derivation Notes
RNEW_NO	License Renewal Number	R	VarChar	12	The Department must submit the License Renewal Number and MUST USE ALL 12 CHARACTERS.	LICENSE-PERMIT-NUMBER
RNEW_DT	Renewal Date	R	Date		The Department is required to send the Renewal Date. Example: 2003-09-01	RENEWAL-YEAR + RENEWAL-MONTH + RENEWAL-DAY
AM_DUE	Amount Due	R	Currency		The Amount Due must be => 0.00. Example: 100.00	LAST-RENEW-FEE
LAT_AM_DUE	Late Amount Due		Currency		The Late Amount Due must be > or = Amount Due and cannot be less then zero. Example: 150.00	LAST-LATE-FEE
TEXT	Text	R	Memo		The Department is required to send text that will print on the Renewal notice.	
TIN	TIN: Tax Identification Number		VarChar	9	The Department may send the Tax Identification Number for the Customer.	CUSTOMER-CODE
TIN_TYP	TIN Type: Tax Identification Type	C	VarChar	1	Only if The Tax ID Number is provided is the TIN TYPE required. The TIN Type must be one of the following valid codes: 1 = EIN 2 = SSN/ITIN/ATIN	
REMT_DEPT	Remit Department	R	VarChar	4	Must be valid on the DEPT Table.	DEPARTMENT
REMT_AD_1	Remit Address 1	R	VarChar	75	The Department is required to send the Remit Address.	
REMT_AD_2	Remit Address 2		VarChar	75	The Department may send the Remit Address Line 2.	
REMT_CITY	Remit City	R	VarChar	60	The Department is required to send the Remit City.	
REMT_ST	Remit State	R	VarChar	2	The Department is required to send the Remit State.	
REMT_ZIP	Remit Zip Code	R	VarChar	10	The Department is required to send the Remit Zip Code.	

Attribute	Description	R/C	Type	Size	NewMMARS Notes	MMARS Derivation Notes
REMT_CNTAC_NM	Remit Contact Name	R	VarChar	60	The Department is required to send the Remit Department Contact Name.	
REMT_CNTAC_PH	Remit Contact Phone	R	VarChar	30	The Department is required to send the Remit Department Contact Phone Number.	
REMT_CNTAC_EMAIL	Remit Contact E-Mail		VarChar	100	The Department may send the Remit email address.	
DIST	Distribution	R	Integer		The Distribution Code must be one of the following codes: 1 = Central Distribution 2 = Department Distribution	

2.2. Transaction .INF Layout

2.2.1 Overview

Currently, interfacing Departments are not required to create/send information files (.INF) for their service requests to MMARS. However, a new interface requirement for NewMMARS is that each interface file submitted via CommBridge will require an accompanying .INF file. The Department will be required to generate their .INF file for their interface file. The .INF will contain information about the Department and transaction information (such as batch counts).

2.2.2 .INF Layout

Tag Name	Description	NewMMARS Notes
NewMmarsBatchID	The Department will be required to submit a unique Batch ID.	• The Batch ID must be 10, 11 or 12 characters. Ex: Format: AAABBBBCCCCD • AAA is the three-character department code; • BBBB is the four digit date (in MMDD format); • CCCC is the two, three, or four character code of the table being interfaced (RDST); and • D is a one character unique distinguisher for the file.
NewMmarsBatchDeptCode	The Department will be required to submit the Department Code for the transaction.	• The NewMmars Batch Department Code should match the Department Code in table row in the interface transaction file.
NewMmarsUnitCode	The Department will be required to submit a Unit Code.	• The NewMmars Unit must be a valid unit code for the department and must be the unit code confirmed with CTR for submitting the interface file.
NewMmarsImportDate	The Department will be required to submit the import date of the interface transaction.	• Date Format.: YYYY-MM-DD Ex: NewMmarsImportDate = 2003-12-01;
NewMmarsTransCode	The Department will be required to submit the NewMMARS Transaction Code.	• The Renewal interface transaction file is a table load, therefore leave the value blank. Value: NewMmarsTransCode = ;
NewMmarsTableName	The Department will be required to submit the NewMMARS Table Name.	• NewMmars Data Object/Table Name will match the Table Name for the interface transaction file. Value: NewMmarsTableName = LIC_RNEW_DT_STRG;
NewMmarsTransCount	The Department will be required to provide the number of transactions submitted in the interface transaction file.	• Numeric whole number. Ex: NewMmarsTransCount = 999;
NewMmarsTransDollarAmount	The Department will be required to provide the total dollar (sum) amount for the transaction file submitted.	• The Dollar Amount associated with this transaction (sum of all the Reneal Fees). Ex: NewMmarsTransDollarAmount = 100.00;

2.3. *Submitting Renewal Files via CommBridge*

NewMMARS Interface XML transaction files must have a .DAT file extension when the transaction file is submitted to CommBridge. The NewMMARS Interface XML transaction files must have an accompanying .INF with the same filename as the .DAT transaction file, except with the .INF file extension.

Example: NewMMARS transaction file name change from .xml to .dat for submitting to CommBridge
NEWMARRS.xml → NEWMARRS.dat
                 NEWMARRS.inf

2.4. *License Renewal Example*

2.4.1 Example – Renewal Transaction

This example is for a License Renewal for the fictitious Department, FUN, using an example ECRT Code of EX01. License Renewals use Department Customer IDs and address information.

The XML for this example:

```
<AMS_DATAOBJECT_XML_IMPORT_FILE VERSION="1.0">
     <LIC_RNEW_DT_STRG AMSDataObject="Y">

          <DEPT_CD Attribute="Y"><![CDATA[FUN]]></DEPT_CD>
          <UNIT_CD Attribute="Y"><![CDATA[AUTO]]></UNIT_CD>
          <ECRT_CD Attribute="Y"><![CDATA[EX01]]></ECRT_CD>
          <EXT_CUST_CD Attribute="Y"><![CDATA[101996857]]></EXT_CUST_CD>
          <EXT_CUST_FRST_NM Attribute="Y"><![CDATA[BILLY]]></EXT_CUST_FRST_NM>
          <EXT_CUST_LAST_NM Attribute="Y"><![CDATA[BURTON]]></EXT_CUST_LAST_NM>
          <EXT_CUST_DIV Attribute="Y"><![CDATA[A new Division field to be added to the form]]></EXT_CUST_DIV>
          <EXT_CUST_AD_1 Attribute="Y"><![CDATA[1 MAIN STREET]]></EXT_CUST_AD_1>
          <EXT_CUST_AD_2 Attribute="Y"><![CDATA[ROOM 819]]></EXT_CUST_AD_2>
          <EXT_CUST_CITY Attribute="Y"><![CDATA[a long city name BOSTON]]></EXT_CUST_CITY>
          <EXT_CUST_ST Attribute="Y"><![CDATA[MA]]></EXT_CUST_ST>
          <EXT_CUST_ZIP_CD Attribute="Y"><![CDATA[02118]]></EXT_CUST_ZIP_CD>
          <RNEW_NO Attribute="Y"><![CDATA[000000011002]]></RNEW_NO>
          <RNEW_DT Attribute="Y"><![CDATA[2004-01-01]]></RNEW_DT>
          <AM_DUE Attribute="Y"><![CDATA[100.00]]></AM_DUE>
          <TEXT Attribute="Y"><![CDATA[This is a place to put text that prints on the renewal notice]]></TEXT>
          <TIN Attribute="Y"><![CDATA[000000000]]></TIN>
```

```
<TIN_TYP Attribute="Y"><![CDATA[2]]></TIN_TYP>
<REMT_DEPT Attribute="Y"><![CDATA[HCF]]></REMT_DEPT>
<REMT_AD_1 Attribute="Y"><![CDATA[1 ASHBURTON PLACE]]></REMT_AD_1>
<REMT_CITY Attribute="Y"><![CDATA[BOSTON]]></REMT_CITY>
<REMT_ST Attribute="Y"><![CDATA[MA]]></REMT_ST>
<REMT_ZIP Attribute="Y"><![CDATA[02118]]></REMT_ZIP>
<REMT_CNTAC_NM Attribute="Y"><![CDATA[Ms. JANE SMITH]]></REMT_CNTAC_NM>
<REMT_CNTAC_PH Attribute="Y"><![CDATA[617-626-0000]]></REMT_CNTAC_PH>
<REMT_CNTAC_EMAIL Attribute="Y"><![CDATA[JANE.SMITH@STATE.MA.US]]></REMT_CNTAC_EMAIL>
<DIST Attribute="Y"><![CDATA[1]]></DIST>


    </LIC_RNEW_DT_STRG>
</AMS_DATAOBJECT_XML_IMPORT_FILE>
```

2.4.2   Example – .INF for the Renewal Transaction

The .INF for this example:

```
NewMmarsBatchID = DMH1222RDST1;
NewMmarsBatchDeptCode = DMH;
NewMmarsUnitCode = 1000;
NewMmarsImportDate = 2003-12-22;
NewMmarsTransCode = ;
NewMmarsTableName = LIC_RNEW_DT_STRG;
NewMmarsTransCount = 3;
NewMmarsTransDollarAmount = 300.00;
```